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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Muller-57

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EXAMINER

HAMMER, KATIE L

ART UNIT

PAPER NUMBER

1796

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,306	Applicant(s) KOCH, HERBERT	
	Examiner KATIE HAMMER	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-17 and 20 is/are rejected.
- 7) ☒ Claim(s) 5 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/26/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

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Claims 1-18 and 20 are pending in this application.

DETAILED ACTION

Claim Objections

Claims 2, 12, and 16 are objected to because of the following informalities:

Claim 2 recites the phrase "in particular, the method in a preferred embodiment".

The Examiner suggests removal of this phrase for providing no additional information to the claim, and that "preferred embodiment" is not typical claim language.

Claim 12 contains the phrase "comprised a of a polyester". The Examiner suggests removal of the first "a" for clarity. Furthermore, the sentence "in one embodiment, the polyesters...have the formula" adds no additional information to the claim and should be removed.

Claim 16 recites the phrase "have from 16 to 180 C₂ to C₄ alkylene units" which is unclear. Clarification and/or correction is/are required.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4, 6-8, 10-12, 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

In the present instance, claim 2 recites the broad recitation more than 90 weight percent, and the claim also recites preferably more than 95 weight percent which is the narrower statement of the range. Claim 3 recites the broad recitation polyol compound(s) with at least 3 OH groups having from 3-12 carbon atoms, and the claim also recites especially glycerol which is the narrower statement of the range/limitation. Claim 4 recites the broad recitation C₁-C₁₈ alcohol, and the claim also recites especially a C₁ to C₆ alcohol, which is the narrower statement of this limitation. Claim 6 recites the broad limitation less than 5000 g/mole, and the claim also recites preferably from 2000 to 5000 g/mole, which is the narrower statement of the range. Claim 7 recites the broad recitation are selected from the group consisting of terephthalic acid,

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isophthalic acid, phthalic acid and their derivatives, and the claim also recites especially terephthalic acid and its derivatives, preferably in a quantity of greater 90 mole% of terephthalic acid and its derivatives which is the narrower statement of the limitation. Claim 8 recites the broad recitation less than 10 weight% of isophthalic acid or its derivatives, and the claim also recites especially no isophthalic acid or its derivatives are employed, which is the narrower statement of the limitation. Claim 11 recites the broad recitation aliphatic C₁ to C₁₈ alcohols, and the claim also recites preferably C₁ to C₆ alcohols, which is the narrower statement of this limitation. Claim 12 recites the broad recitation a C₁ to C₁₂ hydrocarbon residue, and the claim also recites especially ethyl or methyl, which is the narrower statement of this limitation. Claim 14 recites abrasive stones and/or enzymes, and the claim also recites especially at least cellulases, which is the narrower statement of this limitation.

Claim 10 recites the limitation "incorporation of anionic monomers and/or is capped with terminal groups". Claim 15 recites the limitation "the preceding desizing step". There is insufficient antecedent basis for these limitations in claims 10 and 15.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 3, 4, 11-16, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Salsman et al. (US 6,008,182).

Salsman et al. teaches a process for preventing dye redeposition during the washing of a dyed fabric or a garment made from natural fibers, where the process incorporates a dye redeposition inhibiting agent and a water-soluble or water-dispersible polyester resin composition, as claimed in claim 4, (see abstract); and the treatment being applied to indigo dyed denim, as claimed in claims 1 and 12, (see col. 11, lines 53-56); that the oxyalkylated polyol is glycerol, as claimed in claims 3 and 11, (see col. 4, lines 25-29); that the polyester is liquid at room temperature, as claimed in claim 13, (see col. 5, lines 28-36); that the washing compositions contain enzymes such as cellulases, as claimed in claim 14, (see col. 6, lines 43-45); that the anti-redeposition agent is used in all three processes: pre-soak, desize, and abrasion stages for stonewashing, as claimed in claim 15, (see col. 11, lines 56-59); 5-30 moles of alkylene oxide for the oxyalkylated polyol, as claimed in claim 16, (see col. 4, lines 25-29); and indigo dyed denim treated by the method of the invention, as claimed in claim 20, (see col. 11, lines 53-56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 6-9, 11, 13-17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salsman et al. (US 6,008,182), in view of Fujimori et al. (US 6,998,463).

The disclosure of Salsman et al. (US '182) as described above, does not teach that terephthalic acid makes up more than 90 mole percent of the dicarboxylic acid compounds and that ethylene glycol makes up more than 90 mole percent of the diol compounds, and the molecular weight of the polyethylene glycol.

However, Salsman et al. teaches that the dye redeposition inhibiting agents useful in the invention are water-soluble or water dispersible polyester resins made from terephthalate polymers (see col. 3, lines 48-51).

Fujimori et al. (US '463) teaches a polyester resin produced by polycondensing a dicarboxylic acid component containing terephthalic acid and a diol component containing ethylene glycol via an esterification reaction, and preferably the terephthalic acid component constitutes at least 96 mole percent of the dicarboxylic acid component and ethylene glycol constitutes at least 96 mole percent of the diol component, as claimed in claims 2, 7, 9, 17 (see col. 3, lines 56-67) and that the number average molecular weight of the product is preferably from 500 to 5,000, as claimed in claim 6, (see col. 9, lines 54-56); that if isophthalic acid is present it only exists as 0.1 to 3 mole percent of dicarboxylic acid compounds, as claimed in claim 8, (see col. 4, lines 36-42).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify

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the process for preventing or minimizing dye redeposition taught by Salsman et al. with the polyester resin composition taught by Fujimori et al. in order to arrive at the claimed invention, and, thus, a person of ordinary skill in the art would expect such a process to have similar properties to those claimed, absent unexpected results.

Allowable Subject Matter

Claims 5 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record does not teach or disclose the limitations of the instant claims.

Conclusion

The references listed on form PTO-1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATIE HAMMER whose telephone number is (571)270-7342. The examiner can normally be reached on Monday to Friday, 10:00am EST to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KLH/

/Eisa B Elhilo/
Primary Examiner, Art Unit 1796
March 12, 2009